

Serial No. 10/810,891  
December 2, 2005  
Reply to the Office Action dated July 11, 2005  
Page 3 of 13

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (currently amended): An electronic-component conveying device comprising:

a conveying plate which moves in one conveying direction and includes a plurality of component-holders arranged at a predetermined pitch along the conveying direction;

at least one component-containers each containing a plurality of electronic components for supplying the components to at least one of the plurality of component-holders, the plurality of electronic components being held by the plurality of component-holders while being conveyed by the conveying plate;

a component-detecting unit for detecting the presence of the plurality of electronic components in the plurality of component-holders; and

a component-feeding unit for feeding additional electronic components to each of the component-containers based on the detection of the presence of the plurality of electronic components; wherein

each of the plurality of component-holders holds only a single electronic component of the plurality of electronic components; and

the component-detecting unit detects the presence of the single electronic component held in each of respective ones of the plurality of component-holders.

Claim 2 (currently amended): The electronic-component conveying device according to Claim 1, wherein the component-feeding unit feeds a predetermined number of the additional electronic components when the supplied rate of the single electronic component of the plurality of electronic components in each of the respective

Serial No. 10/810,891  
December 2, 2005  
Reply to the Office Action dated July 11, 2005  
Page 4 of 13

ones of the plurality of component-holders falls below a certain rate, or when the number of component-holders that are empty exceeds a certain value.

Claim 3 (currently amended): The electronic-component conveying device according to Claim 1, wherein the at least one component-container includes a plurality of component-containers, the component-holders are arranged in multiple lines along the conveying direction and in multiple rows that are substantially perpendicular to the conveying direction, each of the multiple lines being provided with one of the plurality of component-containers, the component-detecting unit detects the presence of the plurality of electronic components for each of the multiple lines, and the component-feeding unit feeds the additional electronic components to a corresponding one of the containers based on the detection of the presence of the plurality of electronic components for each of the multiple lines.

Claim 4 (currently amended): The electronic-component conveying device according to Claim 1, wherein the component-detecting unit detects the presence of the single electronic component of the plurality of electronic components in each of the respective ones of the plurality of component-holders in a non-contact manner.

Claim 5 (currently amended): The electronic-component conveying device according to Claim 1, wherein the component-detecting unit detects the presence of the single electronic component of the plurality of electronic components in each of the respective ones of the plurality of component-holders in a contact manner.

Claim 6 (currently amended): The electronic-component conveying device according to Claim 1, further comprising:  
a component-inspection unit for measuring electrical properties of the plurality of electronic components and for inspecting the appearance of the plurality of electronic components to determine whether each of the plurality of electronic

Serial No. 10/810,891  
December 2, 2005  
Reply to the Office Action dated July 11, 2005  
Page 5 of 13

components is defective or non-defective, the plurality of electronic components being conveyed to the inspection unit by the conveying plate;

a discharger for discharging the defective ones of the plurality of electronic components conveyed by the conveying plate; and

a collector for collecting the non-defective ones of the plurality of electronic components conveyed by the conveying plate.

Claim 7 (original): The electronic-component conveying device according to Claim 1, wherein the conveying plate rotates in a clockwise direction.

Claim 8 (currently amended): The electronic-component conveying device according to Claim 1, wherein each of the plurality of electronic components ~~are~~ is a substantially rectangular chip components.

Claim 9 (currently amended): The electronic-component conveying device according to Claim 1, wherein the plurality of component-holders have a vacuum suction unit for applying a vacuum to hold the single electronic components of the plurality of electronic components in each of the respective ones of the plurality of component-holders.

Claim 10 (currently amended): The electronic-component conveying device according to Claim 1, wherein the component-detecting unit includes a plurality of cameras for detecting each of the single electronic components of the plurality of electronic components.

Claim 11 (currently amended): The electronic-component conveying device according to Claim 10, further comprising a controller calculating a supplied rate of the plurality of electronic components based on images obtained from the plurality of cameras.

Serial No. 10/810,891  
December 2, 2005  
Reply to the Office Action dated July 11, 2005  
Page 6 of 13

Claim 12 (original): The electronic-component conveying device according to Claim 11, wherein if the supplied rate is below a certain rate, the controller feeds additional electronic components to at least one of the component-containers.

Claim 13 (currently amended): The electronic-component conveying device according to Claim 1, wherein the component-detecting unit includes at least one of a plurality of cameras, a plurality of fiber-optic sensors, a plurality of photoelectric sensors, a plurality of proximity sensors, a plurality of laser sensors, and a plurality of displacement sensors, for detecting each of the single electronic components of the plurality of electronic components.

Claim 14 (currently amended): The electronic-component conveying device according to Claim 13, further comprising a controller calculating a supplied rate of the plurality of electronic components based on signals from the at least one of the plurality of cameras, the plurality of fiber-optic sensors, the plurality of photoelectric sensors, the plurality of proximity sensors, the plurality of laser sensors, and the plurality of displacement sensors.

Claim 15 (original): The electronic-component conveying device according to Claim 14, wherein if the supplied rate is below a certain rate, the controller feeds additional electronic components to at least one of the component-containers.

Claim 16 (new): The electronic-component conveying device according to Claim 5, wherein the component-detecting unit includes at least two detection terminals and the at least two detection terminals come in contact with a respective one of the plurality of electronic components to detect the presence of the respective one of the plurality of electronic components.

Serial No. 10/810,891  
December 2, 2005  
Reply to the Office Action dated July 11, 2005  
Page 7 of 13

Claim 17 (new): The electronic-component conveying device according to Claim 16, wherein the at least two detection terminals also measure the electrical properties of the respective one of the plurality of electronic components to determine whether the respective one of the plurality of electronic components is defective or non-defective.

Claim 18 (new): An electronic-component conveying device comprising:  
a conveying plate which moves in one conveying direction and includes a plurality of component-holders arranged at a predetermined pitch along the conveying direction;  
at least one component-container containing a plurality of electronic components for supplying the components to at least one of the plurality of component-holders, the plurality of electronic components being held by the plurality of component-holders while being conveyed by the conveying plate;  
a component-detecting unit for detecting the presence of the plurality of electronic components in the plurality of component-holders; and  
a component-feeding unit for feeding additional electronic components to each of the component-containers based on the detection of the presence of the plurality of electronic components; wherein  
the component-detecting unit includes a plurality of cameras for detecting the components and a controller calculating a supplied rate of the plurality of electronic components based on images obtained from the plurality of cameras.